

## II. AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the application:

1-9. (Canceled).

10. (Previously Presented) A system for rotating an initial image stored in an image buffer, the system comprising:

a memory having an image rotation module configured to rotate the initial image to create a rotated image by using weighted sums of a plurality of data points of the initial image that represent pixel data values of the initial image and to output the rotated image from the image buffer, wherein the weighting depends on a skew angle of the initial image and data point location in the initial image,

wherein the image rotation module repetitively applies the following algorithm to initial image data to create the rotated image:

$$V_0 = K_h (V_3 - V_4) + K_v (V_2 - V_4) + V_4,$$

wherein  $V_0$  is a data point of the rotated image;  $V_2$ ,  $V_3$ , and  $V_4$  are data points of the initial image that each incorporate a portion of  $V_0$ ; and  $K_h$  and  $K_v$  are fractions that are functions of skew angle and data point location of the initial image.

11. (Original) The system of claim 10, wherein the data points of the initial image are in adjacent rows of the image buffer.

12. (Original) The system of claim 11, wherein a pair of data points are used from each of the adjacent rows of the image buffer.

13. (Original) The system of claim 10, further comprising an image generation module configured to create the initial image.

14. (Original) The system of claim 13, further comprising a scanner for supplying data to the image generation module.

15. (Original) The system of claim 10, further comprising a database configured to store initial image data.

16. (Canceled).

17. (Canceled).

18. (Canceled).

19. (Canceled).

20. (Previously Presented) The system of claim 10, wherein  $K_h$  and  $K_v$  are implemented in  $1/8$ th increments.

21. (Previously Presented) The system of claim 10, wherein  $K_h$  and  $K_v$  are provided in a lookup table.

22. (Original) A workstation comprising the system for rotating an initial image stored in an image buffer of claim 10.

23. (Previously Presented) A computer readable medium having a stored computer program product for processing a first image in an image buffer, the computer program product comprising:

program code configured to rotate the first image to create a rotated image by using weighted sums of a plurality of data points of the first image that represent pixel data values of the first image, wherein the weighting depends on a skew angle of the first image and data point location in the first image; and

program code configured to output the rotated image from the image buffer,

wherein the program code configured to rotate the first image repetitively applies the following algorithm to first image data to create the rotated image:

$$V_0 = K_h (V3 - V4) + K_v (V2 - V4) + V4,$$

wherein  $V_0$  is a data point of the rotated image;  $V2$ ,  $V3$ , and  $V4$  are data points of the first image that each incorporate a portion of  $V_0$ ; and  $K_h$  and  $K_v$  are fractions that are functions of skew angle and data point location of the first image.

24. (Canceled).

25. (Canceled).

26. (Previously Presented) A system for rotating an initial image stored in an image buffer, the system comprising:

an image rotation module configured to rotate the initial image to create a rotated image that is substantially free of an aliasing error using weighted sums of a plurality of data points of the initial image that represent pixel data values of the initial image and to output the rotated image from the image buffer, wherein weighting depends on a skew angle of the initial image and data point location in the initial image and is implemented in 1/8th increments,

wherein the image rotation module repetitively applies the following algorithm to initial image data to create the rotated image:

$$V_0 = K_h * K_v (V1 + V4 - V2 - V3) + K_h (V3 - V4) + K_v (V2 - V4) + V4,$$

wherein  $V_0$  is a data point of the rotated image;  $V1$ ,  $V2$ ,  $V3$ , and  $V4$  are data points of the initial image that each incorporate a portion of  $V_0$ ; and  $K_h$  and  $K_v$  are fractions that are functions of skew angle and data point location of the initial image.

27. (Canceled).